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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,263	11/25/2003	Kenichi Nagami	040301-0640	4091

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FOLEY AND LARDNER LLP
SUITE 500
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WASHINGTON, DC 20007

EXAMINER

HO, CHUONG T

ART UNIT	PAPER NUMBER
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2616

MAIL DATE	DELIVERY MODE
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06/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/720,263

Applicant(s)

NAGAMI ET AL.

Examiner

CHUONG T. HO

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10311370.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/25/03, 12/29/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to the Application SN 10/720,263 filed on 11/25/03. Claim 1-11 are presented for examination.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 11/25/03, 12/29/04 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claim 11 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 11 is considered to be Functional Descriptive Material: "Data Structures" Representing Descriptive Material Per Se or Computer Programs Representing Computer Listing Per Se

Data Structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer.

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In the claim 11, "A computer program product for causing a computer to function as a router device for setting up a label switched path from the router device as a ingress router, the computer product comprising" should be changed to - - A computer readable medium encoded with a computer program code product, the computer program code product executed by a computer, to function as a router device for setting up a label switched path from the router device as a ingress router, the computer program code product comprising: - - .

5. Claims 1-11 are pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsube et al. (U.S. Patent No. 6,341,127) in view of Civanlar et al. (U.S. Patent No. 5,996,021).

In the claim 1, Katsube et al. discloses a system for controlling label switching path set up, which are capable of maintaining the equivalent security function as the

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filtering function that has been carried out for each packet by a conventional router, by limiting the LSP set up and/or packet streams transferred by the LSP (which are identified by the address information such as source / destination addresses, the information regarding the upper layer, etc.) even in the case utilizing the label switching (see col. 2, lines 35-45); comprising:

- ◆ a memory configured to store a router identification information of a target router (see col. 2, lines 60-67) (see col. 3, lines 4-12);
- ◆ a control unit configured to carry out a control to set up the label switched path to the target router stored in the memory (see col. 4, lines 11-22);
- ◆ a memory configured to store in correspondence a label switched path identification information of the label switched path set up according to the control by the control unit and an address information (the address information such source /destination address) to be given to packet, see col. 12, lines 30-35) to be given to packets that are to be transferred by passing through the target router stored in the memory (see col. 4, lines 11-22);
- ◆ a routing processing unit configured to carry out a routing processing for the packets according to the label switched path identification information and address information stored in the memory (see col. 4, lines 11- 22).

However, Katsube et al. does not disclose the target router to be as an egress router, the router device to be as an ingress router .

Civanlar et al. discloses the edge includes an ingress and egress router and the core includes a switch network. The ingress router communicates with and receives an IP

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packet from a source network. The ingress router attaches to each IP packet, a globally unique label which is used to forward the IP packet across the network. The relay switch network communicates with the ingress router, receives the IP packet from the ingress router and forwards the IP packet along its transmission path based on destination information included in its attached label. The egress router receives the IP packet from the switch network and forwards it to a destination network. On received, the destination network forward the IP packet to its intended destination (see abstract); comprising:

♦ A memory configured to store a router identification information of a target router to be

set as an egress router if possible, at a time of setting up a label switched path from the

router device as an ingress router (see col. 5, lines 28-37, col. 9, lines 28-41).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Katsube's system with the teaching of Civanlar to provide a target router to be set as an egress router, the router device to be as ingress router in order to routing the packet according to the label switched path identification information and the address information stored in memory. Therefore, the combined system would have been enable the system to save router resource when finding open the shortest path first.

3. In the claim 2, Katsube et al. discloses a registration unit configured to register

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the label switched path identification information and a router address information of the target router stored in the memory; and to register the label switched path identification information and network / routers to which the packets are to be transferred via the target router stored in the memory (see col. 4, lines 11-22).

4. In the claim 3, Civanlar discloses the registration unit carries out registration when the label switched path is set up by the control unit, and the registration carries registration when a existence or an addition of a network / router stored in the memory is reconfigured according to a prescribed routing control protocol information transferred between the router device and other routers (see col. 9 lines 28-41, col. 8, lines 45-46).

5. In the claim 4, Civanlar discloses the control unit also carries out another control to delete label switched path corresponding to the target router and to update contents of the memory regarding the label switched path identification information when a deletion of the target router stored in the memory is recognized according to a prescribed routing control protocol information transferred between the router device and other routers, and the another control to update a content of the memory regarding the network / router address information when a deletion of one network/router connected to the downstream side of the target router stored in the memory is recognized (see col. 8, lines 45-46, col. 9, lines 28-41).

6. In the claim 5, Civanlar discloses the control unit starts carrying out the control at a timing wherein a existence or an addition of a network / router connected to a downstream side of the target router stored in the memory is recognized according to a

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prescribed routing control protocol information between the router device and other router (see col. 8, lines 45-46, col. 9, lines 2841).

7. In the claim 6, Katsube et al. discloses the target router stored in the memory is selected to be a router that is located at a border of a range in which an identical routing control protocol operates (see col. 4, lines 11-22, col. 7, lines 29-37, col. 8, lines 10-15).

8. In the claim 7, Katsube et al. discloses the target router stored in the memory is selected to be a router that is located at a border (boundary) router of a range to which the label switched path can be extended (see col. 4, lines 11-22, col. 7, lines 29-37, col. 8, lines 10-15).

9. In the claim 8, Katsube et al. discloses the target router stored in the memory is selected to be a router that is located at a border of an overlapping range between a range in which an identical routing control protocol operates and a range to which the label switched path can be extended (see col. 8, lines 10-15, col. 7, lines 29-37, col. 4, lines 11-22).

10. In the claim 9, Katsube et al. discloses the control unit selects one label switch path to be used for transferring those packets which have a specific address information (see col. 12, lines 3037) according to a prescribed criterion, and the memory stores in correspondence the label switched path identification information of one label switched path and the specific address information, when it becomes possible to transfer those packets which have the specific address information by any one of plurality of label switched paths that are set up according to the control by the control unit (see col. 4,

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lines 11-22).

11. In the claim 10, Katsube et al. discloses a system for controlling label switching path set up, which are capable of maintaining the equivalent security function as the filtering function that has been carried out for each packet by a conventional router, by limiting the LSP set up and/or packet streams transferred by the LSP (which are identified by the address information such as source / destination addresses, the information regarding the upper layer, etc.) even in the case utilizing the label switching (see col. 2, lines 35-45); comprising:

- ◆ a memory configured to store a router identification information of a target router (see col. 2, lines 60-67), (see col. 3, lines 4-12);
- ◆ a control unit configured to carry out a control to set up the label switched path to the target router stored in the memory (see col. 4, lines 11-22);
- ◆ a memory configured to store in correspondence a label switched path identification information of the label switched path set up according to the control by the control unit and an address information (the address information such source /destination address) to be given to packet, see col. 12, lines 30-35) to be given to packets that are to be transferred by passing through the target router stored in the memory (see col. 4, lines 1122);
- ◆ a routing processing unit configured to carry out a routing processing for the packets according to the label switched path identification information and address information stored in the memory (see col. 4, lines 11- 22).

However, Katsube et al. does not disclose the target router to be as an egress

router, the router device to be as an ingress router.

Civanlar et al. discloses the edge includes an ingress and egress router and the core includes a switch network. The ingress router communicates with and receives an IP packet from a source network. The ingress router attaches to each IP packet, a globally unique label which is used to forward the IP packet across the network. The relay switch network communicates with the ingress router, receives the IP packet from the ingress router and forwards the IP packet along its transmission path based on destination information included in its attached label. The egress router receives the IP packet from the switch network and forwards it to a destination network.

On received, the destination network forward the IP packet to its intended destination (see abstract); comprising:

- ◆ A memory configured to store a router identification information of a target router to be set as an egress router if possible, at a time of setting up a label switched path from the router device as an ingress router (see col. 5, lines 28-37, col. 9, lines 28-41).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Katsube's system with the teaching of Civanlar to provide a target router to be set as an egress router, the router device to be as ingress router in order to routing the packet according to the label switched path identification information and the address information stored in memory. Therefore, the combined system would have been enable the system to save router resource when finding open the shortest path first.

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12. In the claim 11, Katsube et al. discloses a system for controlling label switching path set up, which are capable of maintaining the equivalent security function as the filtering function that has been carried out for each packet by a conventional router, by limiting the LSP set up and/or packet streams transferred by the LSP (which are identified by the address information such as source / destination addresses, the information regarding the upper layer, etc.) even in the case utilizing the label switching (see col. 2, lines 35-45); comprising:

- ◆ a memory configured to store a router identification information of a target router (see col. 2, lines 60-67), (see col. 3, lines 4-12);
- ◆ a control unit configured to carry out a control to set up the label switched path to the target router stored in the memory (see col. 4, lines 11-22);
- ◆ a memory configured to store in correspondence a label switched path identification information of the label switched path set up according to the control by the control unit and an address information (the address information such source /destination address) to be given to packet, see col. 12, lines 30-35) to be given to packets that are to be transferred by passing through the target router stored in the memory (see col. 4, lines 1122);
- ◆ a routing processing unit configured to carry out a routing processing for the packets according to the label switched path identification information and address information stored in the memory (see col. 4, lines 11- 22).

However, Katsube et al. does not disclose the target router to be as an egress router, the router device to be as an ingress router.

Civanlar et al. discloses the edge includes an ingress and egress router and the core includes a switch network. The ingress router communicates with and receives an IP packet from a source network. The ingress router attaches to each IP packet, a globally unique label which is used to forward the IP packet across the network. The relay switch network communicates with the ingress router, receives the IP packet from the ingress router and forwards the IP packet along its transmission path based on destination information included in its attached label. The egress router receives the IP packet from the switch network and forwards it to a destination network.

On received, the destination network forward the IP packet to its intended destination (see abstract); comprising:

- ♦ A memory configured to store a router identification information of a target router to be set as an egress router if possible, at a time of setting up a label switched path from the router device as an ingress router (see col. 5, lines 28-37, col. 9, lines 28-41).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the Katsube's system with the teaching of Civanlar to provide a target router to be set as an egress router, the router device to be as ingress router in order to routing the packet according to the label switched path identification information and the address information stored in memory. Therefore, the combined system would have been enable the system to save router resource when finding open the shortest path first.

Double Patenting

6. Claim 1 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,683,874 B1.

Although the conflicting claims are not identical, they are not patentably distinct from each other because Claim 1 (6,683,874 B1) discloses A router device for setting up a label switched path from the router device as an ingress router, comprising: a first memory unit for storing a router identification information of a target router to be set as an egress router is possible; a control unit for carrying out a control to set up the label switched path to the target router stored in the first memory unit; a second memory unit for storing in corresponding a label switched path identification information of the label switched path set up according to the control by the control unit and an address information to be given to packets that are to be transferred by passing through the target router in the first memory unit; and a routing processing unit for carrying out a routing processing for the packets according to the label switched path identification information and the address information stored in the second memory unit (col. 15, lines 27-47).

7. Claim 10 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 10 of U.S. Patent No. 6,683,874 B1.

Although the conflicting claims are not identical, they are not patentably distinct from each other because Claim 10 (6,683,874 B1) discloses A label switched path control method at a router device for setting up a label switched path from the router device as an ingress router, comprising: (a) storing a router identification information of a target router to be set as an egress router is possible, in an egress router list;

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(b) carrying out a control to set up the label switched path to the target router stored in the egress router list;

(c) storing in correspondence a label switched path identification information of the label switched path set up according to the control and an address information to be given to packets that are to be transferred by passing through the target router stored in the egress router list, in the routing table; and

(d) carrying out a routing processing for the packets according to the label switched path identification information and the address information stored in the routing table (col. 16, lines 45-65).

8. Claim 11 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 19 of U.S. Patent No. 6,683,874 B1.

Although the conflicting claims are not identical, they are not patentably distinct from each other because Claim 1 (6,683,874 B1) discloses first computer program code for causing the computer to store a router identification information of a target router to be set as an egress router is possible;

A second computer program code for causing the computer to carry out a control to set up the label switched path to the target router stored by the first computer program code;

A third computer program code for causing the computer to store in corresponding a label switched path identification information of the label switched path set up according to the control by the second computer program code and an address information to be

given to packets that are to be transferred by passing through the target router stored by the first computer program code; and

A fourth computer program code for causing the computer to carry out a routing processing unit for carrying out a routing processing for the packets according to the label switched path identification information and the address information stored in the third computer program code (col. 18, lines 15-41).

Conclusion

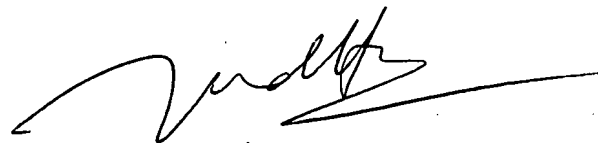
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG T. HO whose telephone number is (571) 272-3133. The examiner can normally be reached on 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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06/21/07



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